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Daniel C. Birkestrand

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IBM CORPORATION, INTELLECTUAL PROPERTY LAW
DEPT 917, BLDG. 006-1
3605 HIGHWAY 52 NORTH
ROCHESTER, MN 55901-7829

EXAMINER

ZHE, MENG YAO

ART UNIT

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2195

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/645,125	Applicant(s) BIRKESTRAND ET AL.	
	Examiner MENG YAO ZHE	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-13, 30-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-2, 4-13, 30-38 are presented for examination.
2. In view of the Appeal Brief filed on 2/5/2009, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Allowable Subject Matter

3. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-8, 10-13, 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zalewski et al., Patent No. 6,260,068 (hereafter Zalewski) in view of Polcyn, Patent No. 5,951,633 (hereafter Polcyn).

5. As per claims 1, 30, 36, 38, Zalewski teaches a method for expanding resource available to a first logical partition on a single computer associated with a client (Column 7, lines 37-43), the method comprising:

Associating one or more partition resources of the first logical partition with another (Column 18, lines 44-57; Column 17, lines 63-67; Column 19, lines 5-11; Column 28, lines 39-43: a partition may change its owner field to de-assign or loan its resources to others, it is obvious that in the specific case that the community, which corresponds to the grid, is the other entity the that the partition wants to de-assign/loan to, the partition resource would then be associated with the community), wherein the

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grid comprises grid resources that are available for use by a plurality of logical partitions associated with the grid (Column 7, lines 53-57);

Providing grid resources from the grid to the first logical partition based upon usage of the partition resource of the first logical partition (Column 15, lines 32-46; Column 19, lines 22-30, lines 63-67);

Providing on-demand resources to the first logical partition, wherein the on-demand resources are available to the system (Column 4, line 56-Column 5, line 3; Column 7, lines 58-61; Column 21, lines 60-65: resources received from another partition that is not in the same community as the first logical partition corresponds to the on-demand resources).

Zalewski does not specifically teach providing on-demand resources to the first logical partition based upon the usage of the partition resources of the first logical partition and a usage of the grid resources, wherein access to the on demand resources is controlled by a manufacturer of the system.

However, Polcyn teaches providing on-demand resources to users based upon the usage of the currently available resources, wherein the on-demand resources are available to the system, and access to the on demand resources is controlled by a manufacturer of the system (Column 3, lines 49-58; Column 2, lines 28-31; Column 4, lines 55-65: overflow resources corresponds to the on-demand resources) for the purpose of meeting emergency resource needs.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Zalewski with providing on-demand

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resources to users based upon the usage of the currently available resources, wherein the on-demand resources are available to the system, and access to the on demand resources is controlled by a manufacturer of the system, as taught by Polcyn, such that the logical partitions of Zalewski may also receive on-demand resources controlled by the manufacture in the event that its own partition resources and grid resources are not sufficient to meet the demands because it allows for the partition to have addition resources in order to meet its emergency needs.

6. As per claim 2, Polcyn teaches comprising metering a usage of the on-demand resources by the client to determine a cost to assess the client (Column 2, lines 16-31). Zalewski teaches using grid resources among logical partitions (Column 15, lines 32-46).

7. As per claims 4, Zalewski teaches wherein associating the one or more partition resources of the first logical partition comprises enabling allocation from the grid resources to the logical partition (Column 7, lines 10-16).

8. As per claim 5, Zalewski teaches wherein associating the one or more partition resources of the first logical partition comprises registering with the grid at least a portion of partition resources associated with the first logical partition, to allow the portion to be allocated to the plurality of logical partitions associated with the grid (Column 18, lines 44-57; Column 17, lines 63-67; Column 19, lines 5-11; Column 28,

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lines 39-43: a partition may change its owner field to de-assign or loan its resources to others, it is obvious that in the specific case that the community, which corresponds to the grid, is the other entity the that the partition wants to de-assign/loan to, then the partition resource would then be associated with the community).

9. As per claim 6, Zalewski teaches wherein providing grid resources comprises: determining an unallocated portion of grid resources and allocating the unallocated portion of the grid resources to the first logical partition (Column 18, lines 22-30, lines 45-51: the resource must be un-owned/unallocated first in order to be assigned to another).

10. As per claim 8, Polcyn teaches wherein providing on-demand resources comprises: determining that sufficient resources are unavailable from the grid resources; and allocating an unallocated portion of the on-demand resources to the user.

11. As per claims 7, 10, 31, Zalewski teaches a method for expanding resources available to logical partitions on a single computer associated with a client, the method comprising:

Registering resources with a grid as grid resources, wherein the grid resources are available for use by a plurality of logical partitions (Column 18, lines 44-57; Column 17, lines 63-67; Column 19, lines 5-11; Column 28, lines 39-43: a partition may change

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its owner field to de-assign or loan its resources to others, it is obvious that in the specific case that the community, which corresponds to the grid, is the other entity the that the partition wants to de-assign/loan to, then the partition resource would then be associated with the community), wherein the grid comprises grid resources that are available for use by a plurality of logical partitions associated with the grid (Column 7, lines 53-57);

Allocating grid resources to a first logical partition (Column 15, lines 32-46; Column 19, lines 22-30, lines 63-67);

Allocation on-demand resources to the first logical partition (Column 4, line 56-Column 5, line 3; Column 7, lines 58-61; Column 21, lines 60-65: resources received from another partition that is not in the same community as the first logical partition corresponds to the on-demand resources);

Zalewski does not specifically teach allocating grid resources to a first logical partition after utilization of partition resources of the first logical partition reaches a first utilization threshold and allocating on-demand resources to the first logical partition after the first logical partition reaches a second utilization threshold for the grid resources, wherein the on-demand resources are available to the single computer, and access to the on demand resources is controlled by a manufacturer of the single computer; and billing the client for usage of the on-demand resources.

However, Polcyn teaches allocating a second resource to user after utilization of the first resource has reached a threshold; allocating an on-demand resource to user after the utilization of the second resource has reached a second utilization threshold,

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wherein the on-demand resources are available to the user (Column 3, lines 50-67) and access to the on-demand resources is controlled by a manufacturer of the single computer and billing the user for usage of the on-demand resources (Column 2, lines 1-5; Column 3, lines 65-67; Column 4, lines 50-65) for the purpose of monitoring resource usages.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Zalewski with the specifics of allocating a second resource to user after utilization of the first resource has reached a threshold; allocating an on-demand resource to user after the utilization of the second resource has reached a second utilization threshold, wherein the on-demand resources are available to the user, as taught by Polcyn, such that the first threshold of Polcyn applies to the partition resource utilization and the second threshold applies to Zalewski's grid resource utilization, because it allows for effective monitoring of resources.

12. As per claim 11, Zalewski in view of Polcyn does not specifically teach billing the client for usage of the grid resources to offset a cost associated with enabling the on-demand resources. However, since Polcyn teaches billing for on-demand resources, it would have been obvious for one having ordinary skill in the art at the time of the applicant's invention to bill for any types of resources, including grid resources.

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13. As per claim 12, Polcyn teaches the method of claim 10, wherein billing the client for usage of the on-demand resources comprises billing the client for the on-demand resources allocated to the first logical partition based upon actual usage of the on-demand resources (Column 2, lines 16-31).

14. As per claim 13, Polcyn teaches wherein billing the client for usage of the resources comprises billing the client for the resources allocated to the user based upon a quantity of the resources allocated and the amount of time for which the quantity of the on-demand resources are allocated (Column 2, lines 16-25; Column 4, lines 11-20). Zalewski teaches on-demand resources may be allocated to the logical partitions (Column 17, lines 63-67).

15. As per claim 32, Polcyn teaches determining that use of the first resource has at least reached a first utilization threshold; determining that usage of the second resource has at least reached a second utilization threshold (Column 3, lines 50-67); and allocating an unallocated portion of the on-demand resources to the logical partition (Column 3, lines 60-67).

16. As per claim 33, Polcyn further teaches the threshold comprising an amount of resources used during a predetermined amount of time. (*Column 2, lines 16-25*)

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17. As per claims 34, 37, Polcyn teaches a first fee and a second fee. (*Column 3, lines 61-67*).

18. As per claim 35, Zalewski in view of Polcyn does not specifically teach wherein at least one of the first fee and the second fee vary based on a factor chosen from the group consisting of a time of day and a time of year. However, it would have been obvious to one having ordinary skill in the art of computing resource provisioning to vary to the fee according to demands and needs for the purpose of maximizing profits over time.

Response to Arguments

19. Applicant's arguments with respect to claims 1-2, 4-13, 30-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MENGYAO ZHE whose telephone number is (571)272-6946. The examiner can normally be reached on Monday Through Friday, 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mengyao Zhe/

/Thomas Lee/

Supervisory Patent Examiner, Art Unit 2115